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Supplemental Material

Xenobiotic Exposure and Migraine-Associated Signaling: A Multimethod Experimental Study Exploring Cellular Assays in Combination with *Ex Vivo* and *In Vivo* Mouse Models

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Figure S1. Cytotoxicity of hTRPA1-HEK cells after pentachlorophenol exposure. One day prior to measuring, cells were seeded at a density of 25,000 cells/well (90 μ L). Cells were treated with pentachlorophenol (PCP) in increasing concentrations (1 μ M, 10 μ M and 100 μ M) for 1 h. The viability reagent alamar blue (10 μ L) was added to the cells and incubated for 1 h. Data is normalized to the vehicle (0.1% DMSO). Control is 10 μ M ionomycin. Data is presented as means \pm SD. One-way ANOVA with Dunnett's correction for multiple comparisons using vehicle as the reference. Numeric data is found in Table S4.

Figure S2. Molecular modeling of acrolein docking in hTRPV1 and hTRPA1. Docking of acrolein into the binding pocket of hTRPV1 and hTRPA1 using the same protocol and parameters as for PCP. (A) 2D representation of the docking pose of acrolein in hTRPV1. (B) 2D representation of the docking pose of acrolein in hTRPA1. (A-B) The pink spheres are polar residues (\$). The green spheres are hydrophobic residues (#). Red borders are for acidic (*) and blue for basic (\dagger). The blue shadows are ligand exposure and receptor exposure.

Table S1. Summary data for Figure 1A.

Table S2. Summary data for Figure 1B.

Table S3. Summary data for Figure 1C.

Table S4. Summary data for Figure S1.

Table S5. Summary data for Figure 2C & 2F.

Table S6. Summary data for Figure 2I.

Table S7. Summary data for Figure 4A. Measured data can be found in Table S11.

Table S8. Summary data for Figure 4B. Measured data can be found in Table S12.

Table S9. Summary data for Figure 4C. Measured data can be found in Table S13.

Table S10. Summary data for Figure 4D. Measured data can be found in Table S14.

Table S11. Non-normalized data for Figure 4A.

Table S12. Non-normalized data for Figure 4B.

Table S13. Non-normalized data for Figure 4C.

Table S14. Non-normalized data for Figure 4D.

Table S15. Summary data for Figure 4E.

Table S16. Summary data for Figure 5A.

Table S17. Summary data for Figure 5B.

Table S18. Summary data for Figure 5C.

Table S19. Summary data for Figure 5D.

Table S20. Summary data for Figure 5E.